

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018362**Date Inspected:** 22-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng, Geng Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 11, OBG BIKE PATH (NWIT # 7447)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) and green tagging of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

BK004A3-022-002, 010 (GREEN TAG NO. 13847)

BK004A5-022-002, 008 (GREEN TAG NO. 13847)

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 10

During random in process inspection this QA inspector observed that ZPMC NDT personnel were performing Ultrasonic Testing (UT) on the weld joints of end plate to bearing plate of OBG bike path. During inspection ZPMC NDT personnel found UT rejectable non conforming indications; these indications are clearly marked on

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the components. The members are identified as OBG Components. The weld designations reviewed are as follows.

BK004A3-031-002, 010

BK004A5-031-002, 008

BAY 11

### OBG BIKE PATH

FCAW welding of weld joints 014 & 015 located on BK005B5-004.

Welder is identified as 205649. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

FCAW welding of weld joints 024 & 025 located on BK005B5-004.

Welder is identified as 042218. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

FCAW welding of weld joints 063 & 070 located on BK005B6-004.

Welder is identified as 205649. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-2332-Tc-P4-F.

FCAW welding of weld joints 061 & 065 located on BK005B8-004.

Welder is identified as 042218. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-2333-Tc-P4-F.

BAY 14

### Segment 13BE

During random in process inspection this QA inspector observed that ZPMC personnel was performing welding of the weld joints of end lifting lug to Longitudinal Diaphragm (LD) of OBG segment 13BE at PP121.5. During welding there was no proper preheat and run of tab at the end of weld joint identified as SEG 3009K-172. Welder is identified as 044774. This QA inspector informed ZPMC CWI Mr. Geng Wei regarding this issue. Mr. Geng Wei informed this QA that this issue would be corrected in a manner compliant with the contract documents. Attached photographs provide additional information.

### Segment 13AE

During random in process inspection of Orthotropic Box Girder (OBG) member identified as segment 13AE this QA observed cracked tack welds on weld joint identified as SEG3007J-034 joining floor beam (FB3111A) to longitudinal Diaphragm (LD3026A) at panel point no. PP119. This QA marked the cracked tacks and informed ZPMC Quality Control (QC) identified as Mr. Zhong Yong Gang of this issue. Mr. Zhong Yong Gang informed this QA that the cracked tacks would be corrected in a manner compliant with the contract documents. Attached photographs provide additional information.

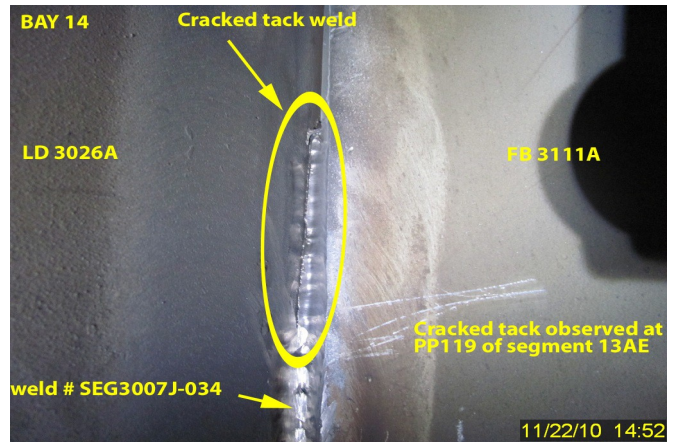
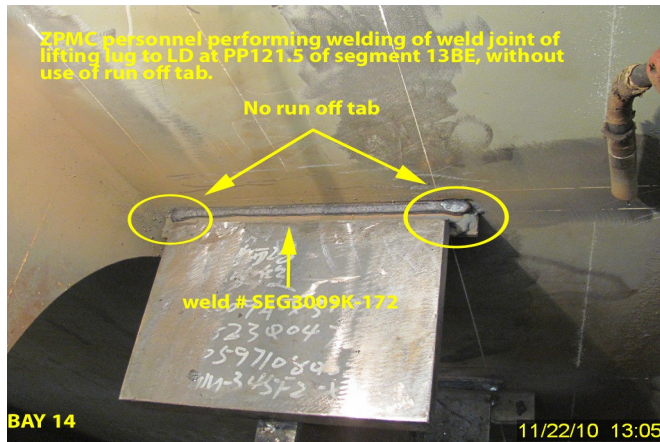
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372/ Thomas Ho - 150002048250, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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